

***Chicago Operations Office  
Information Architecture Plan for Information Management  
Update***

***FY 2003 – FY 2007***

Strategic Planning and Architecture

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## **Information Architecture Plan Overview**

The Chicago Operations Office's (CH) Information Architecture Plan (IAP) for Information Management is a five year view of information technology (IT) products and services. Initially, with the help of our customers, all of CH's business activities were documented and defined and then analyzed to determine the most appropriate application of IT resources. The business activities and the data those activities create or use form the basis for the IAP.

Developing and maintaining IAP has always been a joint effort of representatives from all business lines in CH. The IAP is updated on an annual basis through a collaborative effort between Information Management Services (IMS) and the Information Management Advisory Group (IMAG). This year's update was the first annual update of the IAP since its creation and covers FY 2003 through FY 2007. The five-month update effort provided by the IMAG is greatly appreciated. The IMAG team members are listed below:

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This update incorporates two major changes: the plan strictly focuses on customer needs and services as prioritized by the IMAG and the services offered in the plan are spread across the five-year period based on the anticipated budget. Taking a service-based approach and using the IMAG process to prioritize IT services enables our customers to recognize the effect the available budget has on meeting their IT needs. The anticipated budget serves as the basis for determining how much work can be accomplished in a given year and allocating IT costs to all users and in turn to program offices. The overall IT budget is anticipated to remain approximately the same as last year's \$3M and is funded using the seat cost approach. The seat cost is calculated by dividing the total number of computers into the total budget for IT services. We will maintain our existing level of service and address the CH needs to the extent the budget permits.

Once approved by the Manager, the IAP forms the basis for the development of the FY 2003 IM Budget and Operating Plans. The IAP includes an integrated delivery schedule over five-years, however, requirements, scope, schedules and delivery plans will continue to be reviewed and refined through the IMAG process. The FY 2003 Operating Plan will also continue to be refined as it is developed to help ensure that products and services are delivered effectively and accomplish their intended purpose.

## Information Architecture Plan Overview

This Information Architecture Plan is organized in three sections:

<b>IM Information Architecture Plan Schedule</b>	Provides a target schedule for the delivery of IM products and services.
<b>IM Information Architecture Plan Narratives</b>	<p>Provides a description of each line item in the schedule:</p> <ul style="list-style-type: none"><li>• <b>Current IM Services:</b> IM services currently provided to customers.</li><li>• <b>FY 02 – FY 03 Rollover IM Projects:</b> IM projects initiated in FY 02 and scheduled for completion in FY 03.</li><li>• <b>New IM Services:</b> New IM services are the reprioritized applications resulting from the current architecture update process and planned for FY 03-07.</li><li>• <b>FY 03-04 Dependent Technology Projects:</b> FY 03 and 04 changes to the technology infrastructure that must accompany the rollout of new services.</li><li>• <b>Retirement/Replacement/Update Projects:</b> Projects to retire, replace, or update existing systems based on the implementation of new IM services and discussions with the customer.</li></ul>
<b>Legacy System to New Application Relationships</b>	Provides the relationships between the implementation of new IM services and the potential retirement, replacement, or update of existing systems as a result.

## Information Architecture Plan Overview

During FY 02, IMAG evaluated and reprioritized the original FY 00 IAP list of applications. The IMAG identified five criteria to determine a customer-driven implementation sequence of the applications. Weights were assigned to each of the criteria in terms of perceived importance. The following table shows the criteria, definitions/intent, score guide and weight assigned:

APPLICATIONS ARCHITECTURE UPDATE SCORING CRITERIA – FY 2002

CRITERIA	DEFINITIONS/INTENT	SCORE GUIDE	WEIGHT
External CH Customer Satisfaction	<p>External CH Customer is defined as Hqs, laboratories, universities, grantees, etc.</p> <p>Intended to capture the net increase in external customer satisfaction possible from the implementation of the application. Allows a significant net gain in effectiveness and efficiency in meeting requirements and expectations of CH customers.</p>	<p>0 – No impact to external customers</p> <p>5 - Marginal impact</p> <p>10 - Very significant impact to externals</p>	25%
Not Addressed by DOE-wide Corporate Systems	<p>DOE-wide Corporate System is defined as any system developed for use by all of DOE such as CHRIS, BMIS, EIS, etc.</p> <p>This is intended to measure the degree to which the application is not being addressed by DOE-wide corporate systems.</p>	<p>0 - Completely being addressed by other systems</p> <p>5 - 50% addressed by other systems</p> <p>10 - Not at all addressed by corporate systems</p>	15%
Increasing Internal Efficiency	<p>Internal is defined as relating to, or located within Corporate CH.</p> <p>Net increase in the efficiency of CH. Allows a significant net gain in effectiveness and efficiency in meeting requirements and expectations at CH. Will have a positive impact on CH staff.</p>	<p>0 – No increase to internal efficiency, may impact staff</p> <p>5 - Marginal (some) impact on efficiency, no impact to staff</p> <p>10 - Very significant impact to internal efficiency, benefits staff</p>	20%
Applications in Process	<p>In-process is defined as activities relating to the design or development of an application have begun.</p> <p>Criteria intended to give higher priority to CH-controlled applications that are supported by CH sponsors, are in development and/ or at critical junctures of development here within CH.</p>	<p>0 - Pre-design or analysis, no sponsor support</p> <p>2 - Pre-design, sponsor support</p> <p>4 - Design in process</p> <p>7 - Design complete</p> <p>10 - Final development underway</p>	15%
Data Sequencing	<p>Data sequencing is defined as providing order for the development of applications based on data integration and dependency. The CRUD Matrix (Create, Referenced, Update, Delete) provides the means for data sequencing.</p> <p>Intended to capture whether the application reads other data only, creates its own data, is dependent on data from other applications, is self contained – does not depend on data integration with other applications, or is a repository for other applications.</p>	<p>0 - Reads other data only, does not create data</p> <p>3 - Dependent on data from other applications and creates its own data</p> <p>5 - Self contained; its business processes do not require data integration</p> <p>7 - Creates data for its own use and is a data repository</p> <p>10 - Creates data for its own use, is data repository and application's availability for integration with other applications is critical</p>	25%

After the criteria were developed, each application was thoroughly discussed and analyzed by the IMAG team using this set of criteria.

## Information Architecture Plan Overview

The following table identifies the reprioritized list of applications, the FY 02 and FY 00 priority rankings, Joint Application Development (JAD) and System Development schedule for the current year and FY 03-07, and the estimated costs for JAD and System Development:

Application	FY 02	FY 00	FY					Est Cost
	Rank	Rank	02	03	04	05	06	
Management Decision Support (MDS) – Phase I *		8	J					\$9,163
			SD					\$174,000
<b>Management Decision Support (MDS) – Phase II *</b>								
Operational Performance Analysis (ESH)	1	New	J					\$9,401
				SD				\$140,000
Contract/Financial Assistance	2	1	J					\$9,163
				SD				\$35,000
Program/Project Management Tracking	3	7	J					\$9,163
				SD				\$90,000
Budget Formulation	4	11		J				\$9,660
					SD			\$160,000
Financial Tracking (Budget Execution)	5	5		J				\$9,660
					SD			\$160,000
Performance Management (non-ESH)	6	6		J				\$9,660
						SD		\$90,000
Oversight (non-ESH)	7	2		J				\$9,660
						SD		\$90,000
Document Management	8	3				J		\$10,143
							SD	\$95,000
Laboratory Project Management	9	15				J		\$10,143
							SD	\$95,000
Communications/Event Tracking	10	10				J		\$10,143
							SD	\$95,000
Information Management	11	13				J		\$10,143
								\$100,000
Workflow	12	9						J
								\$10,650
Intellectual Property Information	13	18						J
								\$10,650
Human Resources	14	14						J
								\$10,650
Measurement Application	15	16						J
								\$10,650
Asset Management	16	19						
Travel Management	17	20						
Safeguards and Security	18	17						
Regulatory Compliance **		4						
Office Automation ***		12						

J = Joint Application Development (JAD)

SD = System Development

This 5-year plan provides JAD sessions for the first sixteen applications listed above. It also provides for System Development effort for the first twelve applications. The completion of the JAD sessions and the System Development effort depends largely on whether IT funding stays near the current level.

## **Information Architecture Plan Overview**

\*MDS (Phase I) Portal source selection was initiated in FY 01 and is currently being implemented. Phase I will be completed at the end of FY 02. Therefore, MDS (Phase I) was not part of the prioritization process but was included in this table for clarification. Currently, MDS development efforts include converting existing data which will provide managers the capability to access a consolidated source of analyzed or summarized data. As each new application is developed, it will be reviewed to see if there is any MDS applicability. If there are portions of the applications that benefit inclusion in MDS, it will be included at that time. MDS Phase II is simply a point of review to ensure appropriate functionality from the first seven applications has been completed.

\*\*The Regulatory Compliance application was previously ranked as #4. This application will be covered in the new Operational Performance Analysis for ESH, and in Performance Management and Oversight for non-ESH activities. The IMAG agreed that the Operational Performance Analysis application would be a pilot covering ESH activities. The Performance Management and Oversight applications will remain as separate applications for non-ESH activities pending the development of the Operational Performance Analysis as a pilot.

\*\*\*Office Automation was previously ranked #12. The IMAG decided that this is not an application for system development but is a part of the Technology Architecture. Office Automation includes Commercial-off-the-shelf software products that provide the tools to improve productivity.

Asset Management, Travel Management and Safeguards and Security applications will be accomplished beyond FY 2007 due to funding and staffing constraints.

The preparation of this document was coordinated by the CH Information Management Services Strategic Planning and Architecture team (SPA).

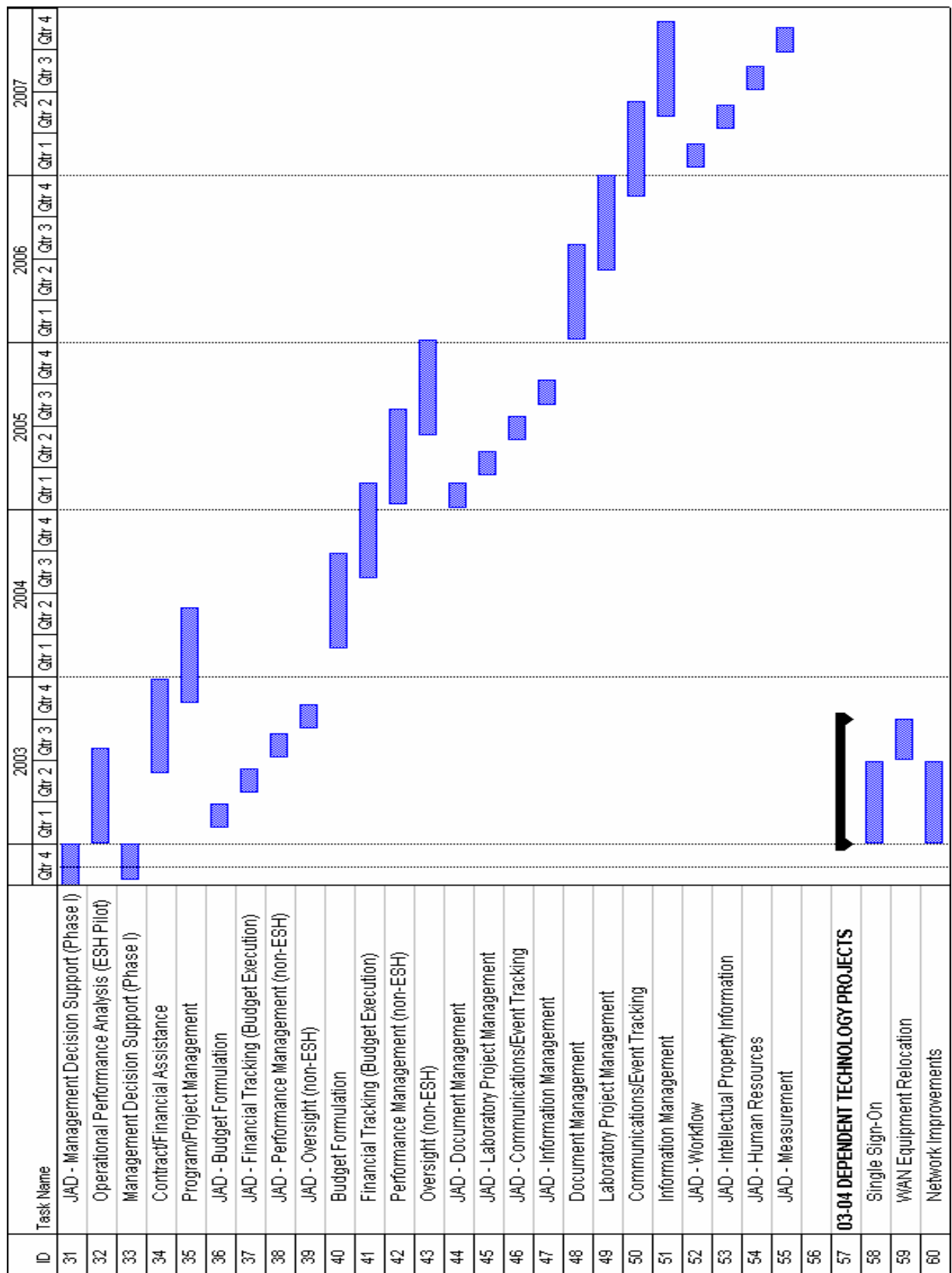
Information Architecture Plan Schedule

ID	Task Name	2003				2004				2005				2006				2007				
		Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
1	<b>CURRENT IM SERVICES</b>																					
2	Cyber Security																					
3	Hardware/Software Maintenance Contracts																					
4	Data Communications Lines																					
5	Other Direct Costs (ODC)																					
6	Indirect Costs																					
7	LAN/WAN Operations																					
8	Misc. Standard Hardware/Software																					
9	Application Maintenance																					
10	Existing Application Maintenance																					
11	Network Servers																					
12	Web Maintenance																					
13	Network Software																					
14	Misc. Non-standard COTS Software																					
15	Information Architecture Plan Update																					
16	Quality Assurance Program																					
17	Help Desk Support																					
18	Computer Refresh																					
19	Printer Refresh																					
20	Laptop Refresh																					
21	Misc. Non-standard Hardware																					
22																						
23	<b>FY 02-03 ROLLOVER IM PROJECTS</b>																					
24	IPRO																					
25	SIMIS Enhancements																					
26	JAD - Contract/Financial Assistance																					
27	JAD - Program/Project Management																					
28																						
29	<b>NEW IM SERVICES</b>																					
30	JAD - Operational Perf Analysis (ESH Pilot)																					



Chicago Operations Office  
Information Architecture Plan for Information Management FY 2003-2007

Information Architecture Plan Schedule



**Chicago Operations Office**  
**Information Architecture Plan for Information Management FY 2003-2007**

**Information Architecture Plan Schedule**

ID	Task Name	2003				2004				2005				2006				2007			
		Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
62	<b>Retirement/Replacement/Update Projects</b>																				
63	AAO Audit Tracking																				
64	ACQ Closeout																				
65	Adobe Acrobat																				
66	ASAP																				
67	CFIS																				
68	CH Reading Room																				
69	Cost																				
70	Coulometry – Plutonium																				
71	Coulometry - Uranium																				
72	Deposits																				
73	DocLog System																				
74	EEO Clearance Tracking																				
75	EPG Labeling System																				
76	ERDMS																				
77	FOIA																				
78	Grants Database																				
79	ICP/AES																				
80	ICP/MS																				
81	Labels Unlimited																				
82	LIMS																				
83	MCNPX																				
84	Microsoft Office																				
85	Microsoft Project																				
86	NEL Instrument Calib																				
87	NEL Technical Timesheets																				
88	NDA Systems																				
89	NEPA																				
90	PalmPilot																				
91	PC DOCS																				

### Information Architecture Plan Schedule

ID	Task Name	2003				2004				2005				2006				2007			
		Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4			
91	ProQuis																				
92	QAP																				
93	Rec Man Trac Sys																				
94	Report																				
95	RUNPAPERS																				
96	RUNPRES																				
97	SAS																				
98	SigmaStat																				
99	SPOS																				
100	Surfer																				
101	Tattle Tools																				
102	TIMS																				
103	Vacancy Announcement System																				
104	X-ray																				

## **Information Architecture Plan Narratives**

### **Current IM Services**

## Information Architecture Plan Narratives

### **Cyber Security**

Provides for the defensive controls and countermeasures that are in place to maintain confidentiality, availability, and integrity of CH systems. CH has established guidelines for the preparation of security plans for applications and systems that process Sensitive But Unclassified (SBU) information.

### **Hardware/Software Maintenance Contracts**

Provides for contracted maintenance support for primary and peripheral hardware and software not under warranty. Provides maintenance agreements for Commercial Off-the-Shelf (COTS) software.

### **Data Communications Lines**

Provides for fixed cost fees for data communications lines between building 201 and Fermi Area Office (FAO), and for remote access to the network for CH employees.

### **Other Direct Costs (ODC)**

Provides for reimbursement of other IT support services contractor costs when authorized by IMS. Budgets and controls expenditures for authorized activities, such as training or hiring of consultants for special tasks.

### **Indirect Costs**

Provides for Indirect costs on training and travel as identified in the IT support services contract.

### **LAN/WAN Operations**

Provides day-to-day operation, maintenance and support of the CH local area network (LAN) and wide area network (WAN).

### **Miscellaneous Standard Hardware and Software**

Provides for limited purchases of approved COTS software and standard hardware.

### **Application Maintenance**

Provides table and production error fixes for existing CH production applications.

### **Existing Applications Maintenance**

Provides code changes to existing CH applications that require enhancements or changes. ***Requests for non-mandatory changes will not be accepted.*** Non-mandatory changes are cosmetic changes such as formatting, font, font style, type size, borders, repositioning columns, etc.

## **Information Architecture Plan Narratives**

### **Network Servers**

Provides the underlying network operating systems (Netware, W2K Server, NT Server, Linux) and hardware to support user applications and data storage in a stable and secure environment. Production, test and developmental networks are fully utilized and represent the latest in technology and security.

### **Web Maintenance**

Provides for design, upgrades, and maintenance support of the CH web site.

### **Network Software**

Provides for purchase and installation of new, as well as upgrades to, network COTS software.

### **Miscellaneous Nonstandard COTS Software**

Provides for purchase of applications software when preferable to systems development.

### **Information Architecture Plan Update**

Updates CH information architecture to include: Principles, Information Resources Catalog, Business Model, Data Architecture, Application Architecture, Technology Architecture, and Information Architecture (Strategic) Plan. Updates the CH-IAP Toolset and the CH Information Architecture Home Page.

### **Quality Assurance Program**

Provides for the practices required to ensure that users' needs are properly defined for new systems developments, and the new systems meet the users' needs and integrate properly within the CH network.

### **Help Desk Support**

Provides phone coverage for the CH Help Desk. The phone analysts are required to answer all phone calls, log all pertinent information, attempt resolution utilizing remote control capabilities, follow the status of each incident until closure, and monitor the DOE-CH Help Desk mailbox. Also, provides deskside (customer workstation) hardware and software support. Supports the phone support team by providing hands-on diagnostics and problem resolution, as required.

### **Computer Refresh**

Replace 1/3 of CH desktop PC's annually.

### **Printer Refresh**

Replace 1/5 of CH printers annually.

## Information Architecture Plan Narratives

### **Laptop Refresh**

Replace 1/3 of CH Laptops annually.

### **Misc. Non-standard Hardware**

Provides for limited purchases of non-standard-issue hardware for individual or group use. In all cases, a business case must be made to justify such purchases.

## **Information Architecture Plan Narratives**

### **FY02-FY03 Rollover IM Projects**



## **Information Architecture Plan Narratives**

### **FY 02- 03 Rollover IM Projects**

#### **IPRO Implementation**

This Albuquerque-developed system should meet about 75% of the functional requirements for the Contracts/Financial Assistance application. Funding was provided by DOE-HQ for licenses, setup, training, and first-year DOE Knowledgebase maintenance, and installation on the CH network. Beta testing should be completed in the first quarter of FY03.

#### **SIMIS Enhancements**

Provides enhancements to the CH Strategic Issue Management Information Systems (SIMIS) by Cycla Corp. The enhancements allow users to develop, print, and make accessible to HQ reports in formats acceptable to EH for accident investigations, EH-2 audits and other DOE Secretarial requests. (The possibility exists that SIMIS may replace the development of the new Operational Performance Analysis Application.)

#### **JAD – Contract/Financial Assistance**

The Joint Application Development process for this application has been delayed due to the high priority of the Management Decision Support/Portal project. This JAD session is scheduled to be completed in the 1<sup>st</sup> quarter of FY 03.

#### **JAD – Program/Project Management**

The Joint Application Development process for this application has been delayed due to the high priority of the Management Decision Support/Portal project. This JAD session is scheduled to be completed in the 1<sup>st</sup> quarter of FY 03.

## **Information Architecture Plan Narratives**

### **New IM Services**

## Information Architecture Plan Narratives

### **Operational Performance Analysis Application (ESH Pilot)**

**Purpose:**

System documents and analyzes operational conditions to assess contractor and laboratory performance. The system will capture information that will aid DOE line management in targeting its oversight and performance monitoring resources as well as identifying new and better performance measures.

**Definition:**

1. Easily document observed conditions from various operational awareness activities in a consistent and relevant format for use in contractor performance analysis.
2. Document and track significant contractor commitments for correcting or improving conditions and processes.
3. Document and track DOE commitments from various sources related to operations and ES&H performance.
4. Identify and allow DOE line management to establish and demonstrate a targeted risk based and performance based oversight program.

**Status:**

This is a new application definition. It replaces the Regulatory Compliance, Oversight & Performance Management application definition for ES&H activities. The Oversight and Performance Management applications will remain as separate applications for non-ES&H activities pending the development of this system as a pilot. As a result of functional analysis it was determined that all ES&H needs should be covered by one application. Phase 1 JAD sessions will focus on ES&H requirements.

**Functions Supported:**

Prepare Report  
Environmental Permitting  
Submit Reports  
Regulatory Compliance  
Review Regulatory and Other Changes

Track Findings  
Operational Awareness  
Monitor Performance of all GOGO's  
and M&O Contractors  
Inform Employees

**Systems Affected:**

NEPA

**Estimated Costs:**

Joint Application Development (JAD) - \$9,401      System Development (SD) - \$140,000

## Information Architecture Plan Narratives

### Management Decision Support Application (MDS)

#### Purpose:

Provide CH decision-makers with the capability to access a consolidated source of analyzed or summarized data. The primary benefit of such a system would be providing timely information to decision-makers enabling them to make more well-informed and timely decisions.

#### Definition:

1. Application would provide decision-makers a personalized start-up page similar to current web-based commercial products (i.e., MyYahoo!). The page should present decision-makers with their primary source of decision level information.
2. Data presented would be summarized in a graphical form if possible and would present the results of previously agreed to analyses. No further analyses should be required.
3. Links from the start-up page would allow access to more detailed information and other CH applications.
4. The applications should allow capability to "drill down" to underlying information, perform ad hoc queries and/or searches.
5. The content and layout of the page should be capable of personalization.
6. The data analyses and/or summarization should represent the status and performance of all CH organizations, programs, and projects. Examples of status would include the status of all resources (FTE's, budget, assets, calendaring, etc.). Performance examples would include programs, projects, diversity, safety, etc.
7. The application should support mobile access. Future capabilities expansion should anticipate the need for support to personal digital assistants and wireless access.
8. The application should support the ability of decision-makers to record, schedule, and track key decisions that must be made.

#### Status:

MDS (Phase I) Portal source selection was initiated in FY 01 and is currently being implemented. Phase I will be completed this fiscal year. Phase II of this project will include additional functionality. The Performance Analysis and Evaluation (PAE) team will determine the requirements for this application.

#### Functions Supported:

Statistical Analysis of Data	Contract is Executed
Monitor Performance	Maintain Operational Awareness
Prepare Reports	Report Anti-deficiencies
Performance Management	Quality Assurance
Submit Report	Issue Solicitation–Update Solicitation Status
Prepare DOE-wide Forms	Report
Data Reporting	Report Excess Personal Property
Determine Annual Performance Ratings	Prepare Final Assessment Report
External Reporting	

#### Systems Affected:

Action Tracking Systems, DocLog System

#### Estimated Costs:

Joint Application Development (JAD) - \$9,163      System Development (SD) - \$174,000

## Information Architecture Plan Narratives

### **Contract/Financial Assistance Application**

**Purpose:**

Generate, record, maintain and track procurement data and documentation supporting the acquisition and financial assistance mission of the Chicago Operations Office.

**Definition:**

1. Enable and support the electronic transmission of solicitations and amendments. Provide for the electronic receipt and recording of proposals and applications.
2. Enable and support the generation, storage, transmission and recording of solicitations, amendments, awards, modifications and related correspondence supporting the acquisition and assistance function. Provide for the electronic receipt, recording and storage of proposals and applications.
3. Link procurement documents to allow single entry of procurement information e.g., data warehouse.
4. Provide real-time access to current FAR, DEAR and local acquisition provisions and clauses and current federal, departmental and local financial assistance provisions in a usable format.
5. Establish and maintain a repository of federal, departmental and local forms required to support the acquisition and assistance function in a usable format. Provide capability to electronically complete, transmit and receive required forms.
6. Enable and support the process of electronically requesting, tracking and recording the results of staff reviews.
7. Enable and support the electronic receipt, review and transmission of scientific and technical information deliverables e.g., final technical reports, topical reports and conference proceedings.

The following definitions are unsupported, but other offices have applications that address them:

8. Link procurement data to other related systems such as DISCAS and PADS to avoid re-entry of data.
9. Provide for the electronic generation, transmission, receipt, recording, assignment and approval of the procurement request authorization process.

The following definitions are unsupported priority needs:

10. Enable and support the electronic receipt, recording, approving, and processing of requests for payment.
11. Enable and support the process of electronically requesting, tracking, receiving, and recording the results of closeout reviews.
12. Provide means to monitor, track and record CH acquisition and assistance performance to support self-assessment initiatives and monitor customer satisfaction.
13. Enable and support the electronic signature, transmission and receipt of fully executed contract and financial assistance awards, modifications and related correspondence.
14. Provide means to monitor, track, record and store CH acquisition and assistance documents.

## Information Architecture Plan Narratives

### Contract/Financial Assistance Application

#### Status:

Definitions numbered 1 through 7 are supported through the IPRO installation.

Definitions numbered 8 and 9 could be supported through an existing application of another office.

Definitions numbered 10 through 14 are currently unsupported needs.

#### Functions Supported:

Record and Monitor Accounting Transactions	Inform Congress
Inform Media	Inform Stakeholders
Inform Regulators	Contractor Workforce Restructuring
Cost/Price Analysis	Develop Maximum Fee/Review M&O Fee
Procurement (Acquisition and Assistance)	M&O Subcontract Administration
Evaluate BAFOs	Conduct Solicitation Briefings
Administer Contracts	Serve as Advisor
Oversee Contractor	Personal Property Transfer
Report Excess Personal Property	Screening of Excess Personal Property
Procurement Assistance Support	Advertise Solicitation Availability
Transfer Ownership of Gov't-Owned Property	Award Execution
Process Payment	Negotiate Initial / Modify Pre-existing Award
Contract Closeout	Monitor Performance
Negotiate Agreements	Obtain Internal & External Pre-Award Reviews
Select Source	Prepare Award Documentation
Prepare Solicitation	Review Solicitation
Issue Solicitation	Amend Solicitation
Receive Offers/Bids/Applications	Evaluate Offers/Bids/Applications including
Modify Contract	BAFOs
Determine Competitive Range	Retire Personal Property
Review Procurement Requests Package	Review Personal Property Management
Contractor Acceptance of Work	Systems
Disposition of Excess Personal Property	Contract is Developed (Federally Funded
DOE Facility Group Authorizes Work	Work)
Laboratory Prime Contract Modified	Contractor Workplace Substance Abuse
Proposal Review and Approval	Program
Contractor Employee Assistance Program	Oversee CH Personal Property Mgmt
Modify Contracts Funding	Program
Process Foreign Personal Property Loans	Contract is Developed (Non-Federally
	Funded)
Manage High Risk Property	Review and Approve Contracts
Implement Business Management Operation	Develop Physical Inventory Methodology
Small Business Advocate	Procurement Request Submission
Issue Solicitation–Update Solicitation Status Rpt	Evaluation & Negotiation by Procurement Ofc
Identify & Eval Small Bus. for Potential Contracts	Monitor Performance of all GOGO's and
Monitor Motor Vehicle Utilization	M&O Contractors
Control Sensitive Items	Distribute Budget Approval for Motor Vehicles
Small Business Outreach	Procure Contractor(s)
Loan Personal Property	Perform Contract Closeout
Administer Gift & Computers for Learning Prog	Coordinate Contract Oversight
Administer Labor Standards	Contract is Executed

**Chicago Operations Office**  
**Information Architecture Plan for Information Management FY 2003-2007**

Motor Vehicle Requisition Annual Reconciliation of DOE F 4300.3

**Information Architecture Plan Narratives**

**Contract/Financial Assistance Application**

License Plates and Decals Coordinate FEDSTRIP Authorization  
Negotiate Contractor HR Provisions

**Systems Affected:**

Grants Database, EEO Clearance Tracking, Rec Man Trac Sys, ACQ Closeout

**Estimated Costs:**

Joint Application Development (JAD) - \$9,163 System Development (SD) - \$35,000

## Information Architecture Plan Narratives

### Program / Project Management Tracking Application

**Purpose:**

Support the management of all CH programs and projects from proposal to closeout.

**Definition:**

1. Support development and review of project/program proposals.
2. Support project/program planning; including strategic planning, prioritization, resources planning, scheduling, budget development, etc.
3. Support project execution; including work authorization, performance measurement, funding control.
4. Support project completion; including technical acceptance, contract closeout, records disposition, etc.
5. Provide capability to record and maintain a customized set of technical, cost, and schedule information. While this customization must allow the use of the graded-approach, a baseline set of required information should be required to support summary applications such as the Management Decision Support Application.
6. Baseline set of information may include linking program and project activities to higher level (strategic) goals.
7. The application should provide a mechanism to record and share CH business experience, or lessons learned.
8. The application should provide program/project managers with tools to promote better management such as real-time access to guidelines, definitions, orders, and other documents, automated reminders or "ticklers" for actions, missing/outlier data, etc., and automated report generation and submittal.
9. Provide for risk identification and management.

**Status:**

This application is currently supported through a variety of commercial and custom software.

**Functions Supported:**

Provide Technical Direction  
Perform Project Management  
Develop Plan  
Monitor Performance  
Perform/Present Reviews  
Work Authorization Plans  
Define Projects  
Defend Budget  
Control Funds  
Briefings  
Proposal Development  
Plan for Start-Up  
Proposal Review and Approval  
Involve Stakeholders  
Authorize Work

Strategic Planning  
Perform COTR Duties  
Project Team Selection  
Develop Acquisition Strategy  
Review Designs  
Issue Program Guidance  
Develop Budget  
Prioritize Budget  
Complete Acceptance Testing  
Develop Work Authorization Document  
Establish Baseline  
Project Integration  
Perform Contract Closeout  
Implement Change Control  
Procure Contractor(s)



## Information Architecture Plan Narratives

### **Program / Project Management Tracking Application**

**Systems Affected:**

QAP, Microsoft Project

**Estimated Costs:**

Joint Application Development (JAD) - \$9,163      System Development (SD) - \$90,000

## Information Architecture Plan Narratives

### Budget Formulation Application

**Purpose:**

Prepare, and submit budget requests from CH groups through CH corporate office to DOE Headquarters. Store, retrieve, analyze and supply budget formulation information. Identify approved budget for CH.

**Definition:**

1. Prepare budget requirements from CH business groups and GOGO's for submittal to DOE-HQ
2. Analyze budget impacts based on House, Senate, Conference marks.
3. Prepare recommended budget for group manager and GOGO's based upon approved funding levels.
4. Summarize/organize schedules and supplementary data identified by HQ throughout the formulation process.
5. Provide cross cut schemes for preparing comparative budget information for analysis and presentations/briefings.
6. Request, prepare, and submit revised levels of funding and FTE authorization with justifications for appeal of the authorization levels to Congress
7. Provide electronic notice and/or view access to funding decisions for laboratories and Institutions.

**Status:**

Budget Formulation currently supported through Excel Spreadsheets. Budget Execution Formulation System (BEFS) customizations carried out in FY2001 did not make application suitable for DOE-CH.

**Functions Supported:**

Develop Budget	Prepare Reports
Budget Formulation	Defend Budget
Prioritize Budget	

**Systems Affected:**

AAO Audit Tracking, Microsoft Office

**Estimated Costs:**

Joint Application Development (JAD) - \$9,660      System Development (SD) - \$160,000

## Information Architecture Plan Narratives

### Financial Tracking (Budget Execution) Application

**Purpose:**

To carry out the approved budget and provide financial information.

**Definition:**

1. Maintain the CH funds control system by controlling allotments, approved funding programs, financial plan changes, administrative allocations, and obligations.
2. Maintain the CH accounting system (DISCAS) through which the assets, liabilities, payments, income, and expenses are controlled.
3. Perform analysis of budget and accounting data and provide financial status reports to customers.
4. Maintain internal accounting and administrative controls and coordinate the requirements of FMFIA.
5. Maintain cost/price analysis system.
6. Maintain day-to-day oversight and awareness of M&O accounting systems. (Oversight linked)
7. Manage audit liaison and follow up activities. (Oversight linked)
8. Provide an electronic method / process for generating financial change documents.
9. Import allotments and obligations from the originating system.
10. Provide direct access to real time budget/financial status information.

**Status:**

OPAC has been replaced with Interagency Payment and Collection (IPAC). IPAC is a web based system provided by Treasury. Small Purchase Order System (SPOS) is no longer being used. Health and Human Services (HHS) was replaced by Automated Standard Application for Payments (ASAP).

**Functions Supported:**

Provide Financial Support	Collect Cash
Reconcile Financial Systems	Validate Data Quality
Support Financial Systems	Record and Monitor Accounting Transactions
Prepare Reports	Prioritize Budget
Develop Maximum Fee/Review M&O Fee	Dispose Assets
Review Disclosure Statements & Cost Acctng	Cost/Price Analysis
Budget Execution	Process Payment
Small Purchases	Control Funds
Validate Real Estate Costs	Respond to FMFIA Request
Pay Argonne Bill	Buyer for Small Purchases
Manage Travel	Monitor Time and Attendance
Award Bonuses	Distribute Budget Approval for Motor Vehicles
Capitalize Equipment	Submit Reports
Depreciate Assets	Support Systems
Respond to Inquiries	Report Anti-deficiencies
Certify Funds	Control Funds
Manage Accounts Receivable	Maintains VISA Impact Card/Checkbook
Budget Execution	

## Information Architecture Plan Narratives

### **Financial Tracking (Budget Execution) Application**

**Systems Affected:**

CFIS, Deposits, Cost, ASAP

**Estimated Costs:**

Joint Application Development (JAD) - \$9,660      System Development (SD) - \$160,000

## Information Architecture Plan Narratives

### Performance Management Application (Non-ESH)

**Purpose:**

To ensure that performance of DOE contractors, CH organizations, CH teams, and CH employees is consistent with all Department of Energy performance objectives.

**Definition:**

SEE OPERATIONAL PERFORMANCE ANALYSIS (OPA) – Depending on the success of OPA (ESH Pilot), it will then be determined if OPA can also be used for Non-ESH activities.

- The application must support the development of performance measures for DOE contractors, CH organizations, CH teams, and CH employees. The automation of this process will enable all elements of CH to access this information for reference, assessments, and reporting requirements.
- The application must support the electronic data input, evaluation, and results reporting to appropriate parties.
- The application will support an automated system where required approvals of the developed measures are performed electronically. This will eliminate multiple paper copies, and save the time, currently required, to route the information throughout the system. Ultimately, it will aid in the measures being acted upon expeditiously.
- The application must be able to record data regarding the previously established performance elements. The data will be from day-to-day operational awareness, periodic reviews, and other pertinent information. This will establish a clear body of information for evaluation of the subjects' performance.
- The application will support periodic and final performance evaluations by ensuring that the body of information, accumulated during the performance period, has been recorded and is available for evaluation. In addition, electronic transmission, and approvals, if required, of the final evaluations to the involved parties will provide for timely receipt of the assessments and further processing (i.e., modification of M&O contracts), if necessary.
- Provide access to historical data, analyze and prepare trending reports.

**Status:**

On hold until the OPA application is completed.

**Functions Supported:**

Distribution of Materials/Samples  
Manage Performance Standards  
Maintain Operational Awareness  
Coordinate Approval of Contractor Products  
Perform Program Reviews and Appraisals  
Customer Satisfaction  
Participate in IG/GAO Audit  
Create Performance Measures  
Review Performance Measures  
Monitor Work Assignments  
Monitor Performance of all GOGO's  
and M&O Contractors

Monitor Performance  
Prepare Performance Plans  
Evaluate Contractor Performance  
Review Contractor Emergency Plan  
Track Corrective Actions  
Assess Contractor Summary Performance  
Web-based Database Management  
Develop Performance Measures  
Set Group Goals  
Implement Business Management Operation  
Diversity Tracking

## Information Architecture Plan Narratives

### **Performance Management Application (Non-ESH)**

**Systems Affected:**

QAP, Microsoft Project

**Estimated Costs:**

Joint Application Development (JAD) - \$9,660      System Development (SD) - \$90,000

## Information Architecture Plan Narratives

### Oversight Application (Non-ESH)

**Purpose:**

To document and track oversight activities conducted by CH.

**Definition:**

SEE OPERATIONAL PERFORMANCE ANALYSIS (OPA) – Depending on the success of OPA (ESH Pilot), it will then be determined if OPA can also be used for Non-ESH activities.

- Oversight activities will create, record and update data on inspections, operational surveillance activities, program and project reviews and appraisals.
- The application will interact with other applications to receive up to date information regarding ES&H requirements, DOE and CH orders and guidelines, performance measures, program and project milestones, human resource services, finance, asset and budget management.
- The application will document, track and share the process of oversight activities such as schedules and the progress status of each oversight activity. The application will provide local and remote access to all current and historical oversight data. The application will facilitate the comment resolution process / factual accuracy and distribution of reports
- This application will be linked with the Performance Management Application and Operational Performance Analysis Application so that the oversight activities data in this application can be used for compliance and trending analyses, corrective action follow-ups and lessons-learned improvements.

These analyses will provide feedback in turn on needed oversight activities.

**Status:**

On hold until the OPA application is completed.

**Functions Supported:**

Administer Labor Standards	Maintain Operational Awareness
Perform Surveillance	Contractor Workforce Restructuring
Respond to Inquiries	Oversee Contractor
Monitor Performance	Complete Acceptance Testing
Monitor Performance of all GOGO's and M&O Contractors	Negotiate Contractor Human Resource Provisions
Implement Business Management Operation	Approve Safeguards and Security Plans
Contractor Employee Assistance Program	Contractor Training Oversight
Contractor Workplace Substance Abuse Program	

**Systems Affected:**

PalmPilot

**Estimated Costs:**

Joint Application Development (JAD) - \$9,660      System Development (SD) - \$90,000

## Information Architecture Plan Narratives

### Document Management Application

#### **Purpose:**

The purpose of this application is to provide a centralized tool for automated storage, sorting, searching and retrieval of "documents."

#### **Definition:**

1. Record profile information such as unique document identifier, medium, location, author, sensitivity indicator, logical grouping, and version.
2. Provide capability to search on a range of attributes including, date, keyword, author, logical grouping, project, program, etc.
3. Store each type of document.
4. Support for multiple formats: word processing, various image formats, electronic forms, spreadsheet, project management software, voice, video, etc.
5. Retrieve document in a view that is specified by the user. Support for multiple formats: word processing, various image formats, electronic forms, spreadsheet, voice, video, etc.
6. Maintain standard document formats.
7. It will provide the capabilities to store, retrieve and dispose of "electronic renderings." It will have the capability to produce the "electronic renderings" in a variety of formats, including standard report formats.

#### **Status:**

A variety of off-the-shelf software is used for Document Management.

#### **Functions Supported:**

Submit Reports	Develop Maintenance Plan
Develop Continuity of Operation Plan	Develop Disaster Recovery Plan
Maintain System Documentation	Develop IM Operating Plan
Classified Document Control	Review Documents
Strategic Planning	Review Plan
Review CH Security Plan	Attract New Customers
Customer Satisfaction	CH Strategic Planning
Receive Offers/Bids/Applications	Prepare Reports
Document Review	Coordinate Records Management
Develop Plan	Freedom of Information Act - FOIA
Implement Business Management Operation	Publish Directives
Review Directives	Coordinate Directives Comment
Destroy Records	Develop Cybersecurity Implementation Plan
Provide Advice on Record Type	Issue Program Guidance
Prepare DOE-wide Forms	Inform Employees
Policy Development	Prepare Technology Position Statements
Review Regulatory and other Changes	Develop Installation Plan
Develop IM Strategic Plan	Maintain Records
Retire Records	

#### **Systems Affected:**

DocLog System, EPG Labeling System, Rec Man Trac Sys, RUNPAPERS, RUNPRES, PC DOCS, Vacancy Announcement System, CH Reading Room, Labels Unlimited, Report



## Information Architecture Plan Narratives

### **Document Management Application**

**Estimated Costs:**

Joint Application Development (JAD) - \$10,143    System Development (SD) - \$95,000

## Information Architecture Plan Narratives

### Laboratory Project Management Application

**Purpose:**

Support the planning, tracking, financial management and reporting of all Government Owned Government Operated (GOGO) Laboratory projects from proposal to closeout.

**Definition:**

1. Support development and review of GOGO Laboratory project proposals for DOE and for Work for Others.
2. Support GOGO Laboratory project planning; including prioritization, resources planning, scheduling, budget development, etc.
3. Support GOGO Laboratory project execution; including milestone documentation, safety reviews, regulatory reviews, evaluation and analysis of data, financial tracking, and coordination of support and review by other CH groups.
4. Support project completion; including internal review, report preparation and customer interactions.
5. Provide capability to record and maintain a customized set of technical, cost, and schedule information.
6. Baseline set of information may include linking GOGO Laboratory project activities to higher level (strategic) goals.
7. The application should provide a mechanism to record and share GOGO Laboratory project safety and business experiences, or lessons learned.
8. The application should provide GOGO Laboratory and project managers with tools to promote better management such as real-time access to previous proposals, guidelines, regulations, and orders; it should provide automated reminders or "ticklers" for actions, data transfer, scheduling conflicts and periodic reporting.

NOTE: While COTS project management software exists, it is typically too all-inclusive for practical use with smaller GOGO Laboratory project planning and tracking activities.

**Status:**

Current needs are being met by existing applications.

**Functions Supported:**

Provide Measurements	Produce Standards
Test Measurement Methods	Implement Measurement Methods
Develop Measurement Methods	Design Measurement Instrumentation
Research Measurement Methods	

**Systems Affected:**

ICP/AES, SigmaStat, Microsoft Project, Plutonium Coulometry, ICP/MS, LIMS III, Uranium Coulometry, NBL Instrument Calib, Surfer, SAS, TIMS, Tattle Tools, X-ray, MCNPX, NBL Technical Timesheets, ProQuis, NDA Systems

**Estimated Costs:**

Joint Application Development (JAD) - \$10,143    System Development (SD) - \$95,000

## Information Architecture Plan Narratives

### Communications / Event Tracking Application

**Purpose:**

Share information about DOE activities.

**Definition:**

1. Prepare communications products for internal and external audiences. Distribute those products through various methods including phone, fax, web, printed material, etc.
2. Record limited information about the person or institution contacted.
3. Advise management on Communications Issues, including on contractor communications activities.
4. Maintain contact information to aid in the solicitation and execution of communications opportunities, including stakeholder activities, press conferences, speeches, top-level visits, etc. and to assist CH in emergency response.
5. Collect information to prepare and distribute reports.

**Meeting Functionality:**

6. Manage information about the venue and logistical resources and arrangements for meetings.
7. Maintain description of the meeting resources: meeting rooms (e.g., layout), equipment (PC installed, projector, number of LAN connections, etc.), communications (telephone, videoconference, speakerphones, etc.).
8. Capture usage information (e.g., time, user) for each resource.
9. Capture resource status (e.g., in service, unavailable) information.

**Status:**

The meeting portion of this application definition is being met through the Automated Reservation System.

**Functions Supported:**

Inform Regulators	Prepare Routine Reports
Counsel Management	Facilitate Secretarial Involvement
Coordinate Event	Facilitate Distribution
Maintain Distribution Lists	Distribute Documents
Inform Congress	Inform Media
Communicate in Emergencies	Educate Public
Prepare Communications	Inform Stakeholders
Small Business Outreach	Coordinate Materials
Maintain Operational Awareness	Maintain Organizational Visibility
Respond to Queries	Communicate IM Activities
Involve Stakeholders	Involve Stakeholders
Briefings	Inform Employees
Conduct Oral Discussions	Respond to Congressional Inquiries
Solicit Speeches	

**Systems Affected:**

Adobe Acrobat

## Information Architecture Plan Narratives

### **Communications / Event Tracking Application**

**Estimated Costs:**

Joint Application Development (JAD) - \$10,143    System Development (SD) - \$95,000

## Information Architecture Plan Narratives

### Information Management Application

**Purpose:**

Plan, develop, identify, and maintain IM architectures to enable all levels of CH to access DOE and Program data necessary to perform their job. To provide CH management with information to make sound, cost effective executive management decisions about IM.

**Definition:**

1. This application will monitor, maintain and support all data, technical, and applications architectures necessary to make tactical and strategic decisions.
2. This application will provide high level summary information, and the ability to "drill down" to specific primary source information.
3. This application will provide current architecture definitions, plans and status information.
4. This application will track user's support.
5. This application will maintain the data dictionary.
6. This application will track and facilitate current data resource sharing.
7. This application will provide configuration management, tracking and proper version control maintenance.
8. This application will track and maintain user and technical requirements information.
9. This application will provide current software development, testing and build status.
10. This application will ensure applications are developed so that they are interoperable to ensure communication between applications throughout CH.
11. This application will ensure and track that training in new applications is available to the users.

**Status:**

This application is currently supported through manual processes and off the shelf software.

**Functions Supported:**

Develop Disaster Recovery Plan	Develop Budget
Perform COTR Duties	Maintain Hardware Inventory
Maintain Hardware	Maintain Network Management/Operation
Maintain Help Desk	Maintain Application Version Control
Assure Quality	Execute Training
Hardware and Software Deployment	Perform Acceptance Testing
Perform Configuration Management	Develop Cybersecurity Implementation Plan
Communicate IM Activities	Develop Functional Design
Develop Web Design	Web page upkeep
Support Systems	Maintain Information Architecture
Develop IM Operating Plan	Develop Maintenance Plan
Conduct Requirements Analysis	Develop Continuity of Operation Plan
Perform Application Development (Programming)	Maintain System Documentation
Conduct Equipment Analysis	Procure Hardware
Acquire Network Software	Provide Meet-Me Conference Numbers
Create Performance Measures	Perform Application Maintenance
System Programming	Perform Database Administration
Hardware and Software Installation	Acquire Application Software and Hardware
Perform System Design	Technology Supported Learning
Conduct Ethics & Standards of Conduct Training	Coordinate New Phones/Equipment

## Information Architecture Plan Narratives

### Information Management Application

Policy Development  
Briefings  
Maintain Training Facility  
Perform System Analysis and Design  
Provide Videoconferencing  
Maintain Telephone Directories  
Develop and Maintain WEB  
Perform COTS Software Management  
Develop Installation Plan  
Perform System Integration and Testing  
Functional Test Plan

Project Integration  
Maintain Laptop Pool  
Perform Project Management  
Provide Pager Support  
Provide Spectrum Management  
Develop IM Strategic Plan  
Develop Budget  
Acquire Application Software  
Prepare Technology Position Statements  
Monitor Network Security/Performance  
External Reporting

### Systems Affected:

Microsoft Project, Rec Man Trac Sys

### Estimated Costs:

Joint Application Development (JAD) - \$10,143      System Development (SD) - \$100,000

## Information Architecture Plan Narratives

### WorkFlow Application

**Purpose:**

The logical sequencing of tasks that allow CH employees to perform, review, monitor and approve different activities. This application will automate coordination among different activities and organizations.

**Definition:**

1. Create and approve workflow maps e.g., logical sequencing review and approval procedures.
2. Route the information, gathered at each step, to subsequent steps based upon job functions, user names, or reporting relationships.
3. Simulate, test, monitor and measure workflow.
4. Manage and track the progress of electronic work products.
5. Link electronic forms to databases and applications.
6. Provide automated rerouting of unattended tasks to assigned backups.

**Status:**

To be determined.

**Functions Supported:**

Review and Approve Contracts	Control Funds
Prepare Reports	Receive Offers/Bids/Applications
Coordinate Materials	Coordinate Approval of Contractor Products
Contractor Workforce Restructuring	Respond to Inquiries
Data Reporting	Approve Safeguards and Security Plans
Review Designs	Administer Labor Standards
Negotiate Contractor HR Provisions	Program Quality Assurance
Proposal Review and Approval	Procurement Request Submission
Evaluation & Negotiation by Procurement Office	Freedom of Information Act (FOIA)
Contract is Executed	Provide Advice and Guidance
Contractor Employee Assistance Program	Manage Travel
Alternative Dispute Resolution (ADR)	Training Administration
Identify and Evaluate Small Business for Potential Contracts	Contractor Workplace Substance Abuse Program

**Systems Affected:**

ProQuis, LGL Action Tracking, ACQ Closeout, DocLog System, RUNREQ, RUNPO, Action Control Tracking

**Estimated Costs:**

Joint Application Development (JAD) - \$10,650

## Information Architecture Plan Narratives

### Intellectual Property Information Tracking Application

**Purpose:**

Manage and track inventions, intellectual property clauses of DOE Research & Development arrangements, provide advice opinions and reporting.

**Definition:**

This application's use is to enable Intellectual Property Law staff to access and monitor real-time information on the status of contracts, inventions, and waivers. The application provides information on various aspects of these functions from creation to retirement. It identifies due dates, types of contract clauses, current status and other information. It provides reports for:

1. Invention docket and due date reports for each attorney and paralegal
2. Waiver docket for each attorney
3. Inventions (and status) reported by each contractor
4. Identifying attorney performance and output (e. g., number of cases filed, disposed of, contracts reviewed).
5. Track numeric data on all phases of invention cycle including total number of inventions, ownership, and patent status.

New Functionality:

6. Electronic submission of invention information to headquarters.

**Status:**

PATMIS system is functional and supports application definitions numbered 1 to 5. Application definition #6 is new and not yet supported.

**Functions Supported:**

Perform Contract Closeout	Assist in Litigation
Oversee Contractor	Provide Legal Advice
Copyright Transfer	Waiver Processing
Patent Licensing	Invention Processing
M&O Subcontract Administration	Procurement Assistance Support
Review Solicitation	Negotiate Agreements
Contract Closeout	

**Systems Affected:**

PATMIS

**Estimated Costs:**

Joint Application Development (JAD) - \$10,650



## Information Architecture Plan Narratives

### Human Resources (HR) Application

**Purpose:**

Support initiation, processing, tracking, documentation, approval and archival of federal human resources actions. Support tracking and analyzing federal human resources personnel information, status, training, and performance; including diversity, expertise, qualifications, experience, workload, etc. Support administration and oversight of contractor HR programs.

**Definition:**

1. The application must support HR recruitment efforts by supporting development of position descriptions, job announcements and advertising. In addition, automated receipt (with dating), review, selection, and offer development should be supported.
2. The application will provide general employee information on DOE human resource programs, such as retirement, leave, benefits, rights, etc. In addition, the application should provide access to site specific information, such as emergency plans, evacuation, workplace hazards etc. This Handbook will be accessible on the Intranet.
3. The application must maintain basic employee information regarding name, address, contact numbers (telephone, fax, E-mail), program area.
4. The application must support the automated development of Individual Development Plans and should provide user resources to facilitate meeting the requirements of specific programs, i.e., the DOE Technical Qualifications Program.
5. The application must provide for automated training registration, review and approval; including, maintenance of information on training courses and the schedule for specific classes. In addition, links to payment processing, travel, and personnel records should be established to automate payment, travel associated with training, and records update. The application must provide for evaluating training, supporting course advertising, and monitoring employee attendance.
6. The application must provide for automated storing and summarizing of federal staffing levels and associated "drill-down" data.
7. All information contained by this application must follow Privacy Act and governmental regulations. Therefore, viewing rights for all information will have to be established and built into the application.
8. The application (or a module thereof) should support DOE-HR activities related to negotiating prime contracts, administering Davis Bacon and Service Contract Programs, and providing oversight and advice on contractor HR programs. In order to do this, the system must maintain basic information about contractor compensation and benefit programs (including collective bargaining and workforce restructuring).

An application developed by headquarters will support the following functions:

9. The application must record information on HR actions such as performance evaluation, training, retirement, etc. - maintain in an easily accessible and useable format, all information regarding the results of HR actions such as compensation, disciplinary action, recognition, transfer, job positions, performance standards etc.
10. The application must support the administration of DOE training programs including scheduling of courses, documentation of annual needs assessments, budget development, online performance satisfaction surveys, etc.

## Information Architecture Plan Narratives

### Human Resources Application

11. In order to facilitate full and efficient use of human resources, the application must allow for recording, maintaining, and tracking standard information elements regarding personnel expertise, qualifications, workload, etc. This should enable management to quickly select experts for given tasks.

Unsupported functionality:

12. Review and improve automated Time and Attendance to add flexibility in participating in more alternative work schedule features without added burden on time keepers (existing with current Time and Attendance procedures).

#### **Status:**

Definitions numbered 1 through 8 are currently supported through CHRIS.

Definitions numbered 9 through 11 will be supported by a DOE-HQ application.

Definition number 12 is new and is not currently supported by an existing or planned application.

#### **Functions Supported:**

Determine Compensation	Maintain Rewards and Recognition
Review Report	Negotiate Contractor Human Resource Provisions
Contractor Employee Assistance Program	Execute Training
Administer Labor Standards	Conduct Training
Administer Benefits	Process Personnel Actions
Prepare Position Description	Provide Advice
Manage Performance Standards	Hire Federal Employees
Recommend Staff Allocations	Contractor Workforce Restructuring
Administer Training	Succession/Workforce Planning
Administer Financial Disclosure Form Process	Technology Supported Learning
Training Administration	Individual Development Plans
Improve and Maintain Workforce Competence	Prepare Performance Improvement Plans
Training Needs Assessment	Diversity Education
Contractor Workplace Substance Abuse Program	Award Bonuses
Conduct Ethics & Standards of Conduct Training	Prepare Individual Development Plans
Perform Employee Appraisals	Prepare Performance Evaluation Plans
Management Accountability for Creating a Learning Environment	

#### **Systems Affected:**

Vacancy Announcement System, Rec Man Trac Sys, AllNames, Internal/External Vacancy, Training Reservation System, Rewards & Recognition

#### **Estimated Costs:**

Joint Application Development (JAD) - \$10,650

## Information Architecture Plan Narratives

### Measurement Application

**Purpose:**

Record, track and share measurements among remote and local entities; prepare and communicate the information or a report.

**Definition:**

1. Allow tracking of nuclear material and of measurement/experimentation equipment handling, shipping, monitoring and receiving.
2. Allow local and remote transfer of measurement data.
3. Allow review and analysis of measurement data; link to statistical applications as appropriate.
4. Allow report formatting and generation.
5. Link to Laboratory Project Management Application.
6. Link application directly to laboratory equipment and to remote sampling and sensing devices NOTE: Currently this data is provided by laboratory equipment on nuclear materials and by remote sampling and sensing devices on radiation and radioactivity associated with natural or anthropogenic sources

**Status:**

Current needs are being met by existing applications.

**Functions Supported:**

Provide Information Management

**Systems Affected:**

ICP/AES, RAMP, SigmaStat, Phosphorimeter, Balance QA Data, X-ray, ICP/MS, Jext, LAHET Code System, MCNPX, Labels Unlimited, Minitab, TIMS, Tattle Tools, NBL Instrument Calib, NDA Systems, LIMS III, SASP, SRIM 2000, Uranium Coulometry, SAS, Plutonium Coulemetry, Surfer, Java, javac, et cetera

**Estimated Costs:**

Joint Application Development (JAD) - \$10,650

## Information Architecture Plan Narratives

### **FY 03-04 Dependent Technology Projects**

## Information Architecture Plan Narratives

### **Single Sign-On**

#### **Description**

Single sign-on provides a secure method for accessing applications which eliminates the need for multiple passwords for users of DOE-CH network systems. Currently known as Novell SecureLogin, this Novell product will provide DOE-CH users with secure (168-bit triple-DES encryption) single sign-on access to virtually any application on the network. Because it is integrated with the directory, SecureLogin will enable CH administrators to seamlessly control access to network resources based on DOE-CH security policies and user profiles.

#### **Prerequisites**

- None

#### **Dependents**

- None

#### **Related Business Activities**

Supports all CH business activities.

#### **Justification**

Novell SecureLogin simplifies administrative and web development efforts (labor dollars) by leveraging CH's directory identity information across Netware 6, Windows 2000, NT and Linux platforms. By decreasing the number of password related helpdesk calls, SecureLogin reduces cumulative lost man-hours for both the users and support staff when applications cannot be accessed in an expedient fashion. Considering how often passwords are forgotten, this has the potential to translate into a significant labor savings.

## Information Architecture Plan Narratives

### **WAN Equipment Relocation**

#### **Description**

Physically relocate LAN/WAN communications equipment from building 221 into building 201 to improve DOE-CH's control and security over its "epicenter" for all data communications. This relocated equipment includes a Cisco 5500 switch with an RSM router, Cisco PIX firewall, DOENet routers and the DOE-CH DHCP server. A significant benefit from this relocation will include an upgrade for all CH fiber optic campus runs from multi-mode to single-mode.

#### **Prerequisites**

- None

#### **Dependents**

- None

#### **Related Business Activities**

Supports all CH business activities.

#### **Justification**

Security concerns were brought into view when an audit cautioned DOE-CH over the physical access and control of their critical data communications link to DOENet and the outside "world". Currently, this equipment is contained in the Argonne Communications Center (Building 221). ANL has full access to the equipment while DOE-CH has limited access. It was recommended that DOE-CH retain full and "sole" physical access and control over this vital equipment. With options limited to building an expensive security wall around the equipment in building 221, it was determined that relocation was the preferred alternative.

## Information Architecture Plan Narratives

### **Network Improvements**

#### **Description**

To procure and install the following equipment for the DOE-CH network: a new tape back-up unit; replacement Firewall hardware; four new servers for the Mail Gateway, Outlook Web, and DMZ (2) services; LAN Management Solution (Cisco Works2000) software for configuration, fault monitoring and troubleshooting the network; and Intrusion Detection System (IDS) software and hardware.

#### **Prerequisites**

- None

#### **Dependents**

- None

#### **Related Business Activities**

Supports all CH business activities.

#### **Justification**

Acquire and install the above listed hardware and software for detection, prevention and reaction to unauthorized network activity. Procuring these products will improve overall network security, disaster prevention, and work towards the resolution of audit recommendations.

## **Retirement/Replacement/Update Projects**



### **Retirement/Replacement/Update Projects**

A majority of the “New IM Services” represent new CH corporate applications. As these new applications are implemented, the potential exists for existing legacy systems to be retired, replaced, or updated. This part of the IM Information Architecture Plan schedule identifies the existing systems (listed in alphabetical order) that have this potential and links them to the new applications. Using this schedule, IMS will initiate discussions with the customer to plan for the possible retirement, replacement, or update of these legacy systems. No system will be retired, replaced, or updated without the approval of the customer.

## **Legacy System to New Application Relationships**

This section provides information on the legacy systems currently in place and links them to the new application to be developed and the estimated timeframe for implementation.

<b>Legacy System</b>	<b>New Application</b>	<b>New Application Implementation</b>	
AAO Audit Tracking	Budget Formulation	FY 2003	Q3
ACQ Closeout	Contract/Financial Assistance	FY 2003	Q4
Adobe Acrobat 3.0	Communications/Event Tracking	FY 2007	Q2
ASAP	Fin Tracking (Budget Execution)	FY 2005	Q1
CFIS	Fin Tracking (Budget Execution)	FY 2005	Q1
CH Reading Room	Document Management	FY 2006	Q3
Cost	Fin Tracking (Budget Execution)	FY 2005	Q1
Coulometry – Plutonium	Laboratory Project Management	FY 2006	Q4
Coulometry – Uranium	Laboratory Project Management	FY 2006	Q4
Deposits	Fin Tracking (Budget Execution)	FY 2005	Q1
DocLog System	Document Management	FY 2006	Q3
EEO Clearance Tracking	Contract/Financial Assistance	FY 2003	Q4
EEO Clearance Tracking	Operational Performance Analysis	FY 2003	Q3
EPG Labeling System	Document Management	FY 2006	Q3
ERDMS	Operational Performance Analysis	FY 2003	Q3
FOIA	Operational Performance Analysis	FY 2003	Q3
Grants Database	Contract/Financial Assistance	FY 2003	Q4
ICP/AES	Laboratory Project Management	FY 2006	Q4
ICP/MS	Laboratory Project Management	FY 2006	Q4
Labels Unlimited	Document Management	FY 2006	Q3

## Legacy System to New Application Relationships

Legacy System	New Application	New Application Implementation	
LIMS III	Laboratory Project Management	FY 2006	Q4
MCNPX	Laboratory Project Management	FY 2006	Q4
Microsoft Office	Budget Formulation	FY 2003	Q3
Microsoft Project	Information Management	FY 2007	Q4
Microsoft Project	Laboratory Project Management	FY 2006	Q4
Microsoft Project	Performance Management	FY 2005	Q3
Microsoft Project	Program/Project Management	FY 2004	Q2
NBL Instrument Calib	Laboratory Project Management	FY 2006	Q4
NBL Technical Timesheets	Laboratory Project Management	FY 2006	Q4
NDA Systems	Laboratory Project Management	FY 2006	Q4
NEPA	Operational Performance Analysis	FY 2003	Q3
PalmPilot	Oversight	FY 2005	Q4
PC DOCS	Document Management	FY 2006	Q3
ProQuis	Laboratory Project Management	FY 2006	Q4
QAP	Performance Management	FY 2005	Q3
QAP	Program/Project Management	FY 2004	Q2
Rec Man Trac Sys	Contract/Financial Assistance	FY 2003	Q4
Rec Man Trac Sys	Document Management	FY 2006	Q3

## Legacy System to New Application Relationships

<b>Legacy System</b>	<b>New Application</b>	<b>New Application Implementation</b>	
Rec Man Trac Sys	Information Management	FY 2007	Q4
Report	Document Management	FY 2006	Q3
RUNPAPERS	Document Management	FY 2006	Q3
RUNPRES	Document Management	FY 2006	Q3
SAS	Laboratory Project Management	FY 2006	Q4
SigmaStat	Laboratory Project Management	FY 2006	Q4
SPOS	Fin Tracking (Budget Execution)	FY 2005	Q1
Surfer	Laboratory Project Management	FY 2006	Q4
Tattle Tools	Laboratory Project Management	FY 2006	Q4
TIMS	Laboratory Project Management	FY 2006	Q4
Vacancy Announcement Sys	Document Management	FY 2006	Q3
X-ray	Laboratory Project Management	FY 2006	Q4

## **GLOSSARY**

The definitions that follow present some essential information about acronyms and terms commonly used in this Information Architecture Plan.

AAO	Argonne Area Office
ACQ	Acquisition
ADR	Alternate Dispute Resolution
ASAP	Automated Standard Application for Payments
BAFO	Best and Final Offer
BAO	Brookhaven Area Office
BEFS	Budget Execution Formulation System
BMIS	Business Management Information System
CFIS	CH Financial Information System
CH	Chicago Operations Office
CHRIS	Corporate Human Resource Information System
COTS	Commercial Off-the-Shelf
COTR	Contracting Officer Technical Representative
CR	Office of Chief Financial Officer
CRUD	Create, Reference, Update, Delete
DEAR	Department of Energy Acquisition Regulation
DHCP	Dynamic Host Configuration Protocol Server
DISCAS	Departmental Integrated Standardized Core Accounting System
DMZ	Demilitarized Zone
DOE	Department of Energy
EIS	Executive Information System
EEO	Equal Employment Opportunity
EML	Environmental Measurements Laboratory
EPG	Environmental Programs Group
ERDMS	Exposure Records Data Management System
ESH	Environment, Safety and Health
FAO	Fermi Area Office
FAR	Federal Acquisition Regulation
FMFIA	Federal Managers Financial Integrity Act
FTE	Full-Time Employee
FOIA	Freedom of Information Act
FY	Fiscal Year
GOGO	Government-Owned Government Operated
HHS	Health and Human Services
HQ	Headquarters
HR	Human Resources
IAP	Information Architecture Plan
ICP/AES	Inductively Coupled Plasma/Atomic Emission Spectrometry
ICP/MS	Inductively Coupled Plasma/Mass Spectrometry
IDS	Intrusion Detection System
IG/GAO	Inspector General/Government Accounting Office
IM	Information Management

## **GLOSSARY**

IMS	Information Management Services
IMAG	Information Management Advisory Group
IPAC	Interagency Payment and Collection
IPL	Intellectual Property Law
IPRO	Intelligent Procurement System
IT	Information Technology
JAD	Joint Application Development
LAN	Local Area Network
LAN/WAN	Local Area Network/Wide Area Network
LGL	Legal
LIMS	Laboratory Information Management System
M&O	Manage and Operate
MA	Management and Administration
MCNPX	Monte Carlo Radiation Transport
MDS	Management Decision Support
NBL	New Brunswick Laboratory
NDA	Nondestructive Assay
NEPA	National Environment Policy Act
ODC	Other Direct Costs
OM	Office of the Manager
OPA	Operational Performance Analysis
PADS	Procurement Automated Data System
PAE	Performance Analysis and Evaluation
PAO	Princeton Area Office
PATMIS	Patent Management Information System
PC	Personal Computer
PIX	Private Internet Exchange
PMO	Program and Project Management
ProQuis	Tracking and Reporting
QAP	Quality Assurance Program
RAMP	Remote Atmospheric Monitoring Program
R&D	Research and Development
Rec Man Trac Sys	Records Management Tracking System
RSM	Routing Switch Module
RUNPAPERS	Publications Program
RUNPO	Requisitioning Program
RUNPRES	Presentations Program
RUNREQ	Requisitioning Program
SAS	Statistical Package
SASP	Surface Air Sampling Program
SBU	Sensitive But Unclassified
SD	System Development
SigmaStat	Statistics Program for QAP
SIMIS	Strategic Issue Management Information System
SPA	Strategic Planning and Architecture

## **GLOSSARY**

SPOS	Small Purchase Order System
TIMS	Thermal Ionization Mass Spectrometry
TS	Technical Services
WAN	Wide Area Network